EUROPEAN PATENT OFFICE

Patent Abstracts of Japan

PUBLICATION NUMBER : 09121485
PUBLICATION DATE : 06-05-97

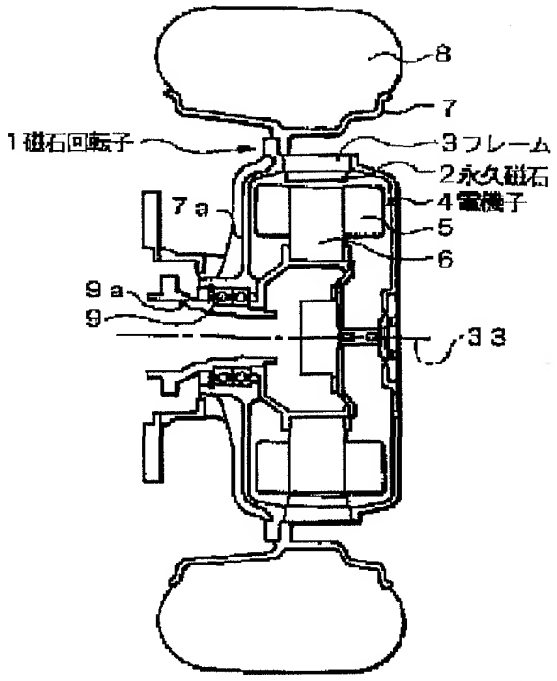
APPLICATION DATE : 24-10-95
APPLICATION NUMBER : 07298908

APPLICANT : HITACHI METALS LTD;

INVENTOR : MITA MASAHIRO;

INT.CL. : H02K 1/27 H02K 15/03 H02K 21/22

TITLE : MAGNET ROTOR FOR ELECTRIC ROTATING MACHINE



ABSTRACT : PROBLEM TO BE SOLVED: To enable the reduction of current loss and leakage flux by forming the magnetic poles of a permanent magnet from an aggregate of permanent magnet pieces divided in the directions of the circumference and rotational axis of a magnet rotor.

SOLUTION: A magnet rotor 1 for electric rotating machines has a permanent mange 2 in large size installed at its inner radius; the permanent magnet is composed of an aggregate of permanent magnet pieces the magnetic poles of which are divided in the directions of the circumference and the rotational axis of the magnet rotor 1. In addition a ferromagnetic frame 3 is installed at the outer radius of the permanent magnet 2 to form the magnet rotor 1 for electric rotating machines. With respect to the permanent magnet 2, a rim 7 is connected to the frame 3, and a tire 8 is installed on the rim 7. A flange 7a installed at the inner radius of the rim 7 in the radial direction, is rotatably supported on a shaft 9a with a bearing 9 in-between. Thus a drive system for electric vehicles is constituted. Further, an armature 4 containing an armature coil 5, an armature core 6 and the like is installed at the inner radius of the permanent magnet 2 with an air gap in-between.